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comparing the amount of said axonally-derived tau protein bound to said at least one monoclonal antibody in step (c) to control samples from the group representing a normal undamaged axon state and those representing an axonal damage state.

Claim 17 (four times amended). A method according to Claim 14 wherein said axonally-derived tau protein is a fragment of said tau protein of SEQ ID NO:1 demonstrating an apparent molecular weight in the range of 30 kDa to 50 kDa.

Claim 17 (four times amended). A method according to Claim 14 wherein said axonally-derived tau protein is a fragment of said tau protein of SEQ ID NO:1 demonstrating an apparent molecular weight in the range of 30 kDa to 50 kDa.

Claim 24 (four times amended). A method according to Claim 23 wherein said axonally-derived tau protein bound to said at least one monoclonal antibody is a fragment of tau protein SEQ ID NO:1 which is detected through gel electrophoresis and which gives rise to an electrophoresis gel demonstrating multiple protein bands with apparent molecular weights from 30 kDa to 50 kDa.

Claim 31 (twice amended). A method of determining axonal damage in the head of a patient suspected of having traumatic head injury, said method comprising the steps of:

- (a) obtaining a sample of cerebrospinal fluid from said patient;
- (b) treating said sample of cerebrospinal fluid with at least one monoclonal antibody, said at least one monoclonal antibody having been raised against an axonally-derived tau protein of SEQ ID NO:1;
- (c) detecting the presence of said axonally-derived tau protein bound to said at least one monoclonal antibody; and
- (d) comparing the amount of said axonally-derived tau protein bound to said at least one monoclonal antibody in step (c) to control samples selected from the group representing a normal undamaged axon state and those representing an axonal damage state.

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